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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,819	09/05/2003	Cheng-Lien Chiang	BDG005-1-4	8002
23931	7590	03/02/2005	EXAMINER	
DAVID M SIGMOND 487 BLACKFOOT STREET SUPERIOR, CO 80027				ZARNEKE, DAVID A
ART UNIT		PAPER NUMBER		
		2829		

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/655,819	CHIANG, CHENG-LIEN
	<b>Examiner</b> David A. Zarneke	<b>Art Unit</b> 2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 September 2003.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 61-120 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) \_\_\_\_\_ is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) 61-120 are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date  
4)  Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Election/Restrictions***

This application contains claims directed to the following patentably distinct species of the claimed invention: a semiconductor device package comprising:

- 1) an insulative housing that contacts the chip; or
- 2) an insulative housing that covers the lower surface and contacts the chip, and wherein an electrically conductive path between and in contact with the lead and the pad is devoid of a wire bond; or
- 3) an insulative housing that contacts and covers the lower surface, wherein the peripheral portion is integral with the peripheral and inner side surfaces and non-integral with the central portion, the peripheral portion protrudes downwardly from the central portion, and the top and bottom surfaces, peripheral and inner side surfaces and peripheral and central portions are exposed, and wherein an electrically conductive path between and in contact with the lead and the pad is devoid of a wire bond; or
- 4) an insulative housing that contacts and covers the lower surface, wherein the peripheral portion is integral with the peripheral and inner side surfaces and non-integral with the central portion, the peripheral portion protrudes downwardly from the central portion, and the top and bottom surfaces, peripheral and inner side surfaces and peripheral and central portions are exposed, and wherein an electrically conductive path between and in contact with the lead and the pad is devoid of a wire bond, and the lead

and the electrically conductive path are no closer to the top surface than the upper surface is to the top surface; or

5) an insulative housing that contacts and covers the lower and outer side surfaces, wherein the peripheral portion is integral with the peripheral and inner side surfaces and non-integral with the central portion, the peripheral portion protrudes downwardly from the central portion, and the top and bottom surfaces, peripheral and inner side surfaces and peripheral and central portions are exposed, and wherein the lead includes a recessed portion that contacts and extends into the insulative housing and is spaced from the top and bottom surfaces and does not overlap the chip and a non-recessed portion that contacts and extends outside the insulative housing and is adjacent to the recessed portion and the bottom surface, and an electrically conductive path between and in contact with the lead and the pad is devoid of a wire bond; or

6) an insulative housing that contacts and covers the lower and outer side surfaces, wherein the peripheral portion is integral with the peripheral and inner side surfaces and non-integral with the central portion, the peripheral portion protrudes downwardly from the central portion, and the top and bottom surfaces, peripheral and inner side surfaces and peripheral and central portions are exposed, and wherein the lead includes a recessed portion that extends into the insulative housing and is spaced from the top and bottom surfaces and a non-recessed portion that extends outside the insulative housing and is adjacent to the recessed portion and contacts the insulative housing, the recessed and non-recessed portions each include four outer surfaces, three of the outer surfaces of the recessed and non-recessed portions that do not face

in the same direction as the bottom surface are coplanar with one another where the recessed and non-recessed portions are adjacent to one another, one of the outer surfaces of the recessed and non-recessed portions that face in the same direction as the bottom surface are not coplanar with one another where the recessed and non-recessed portions are adjacent to one another, an electrically conductive path between and in contact with the lead and the pad is devoid of a wire bond, and the lead and the electrically conductive path are no closer to the top surface than the upper surface is to the top surface.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

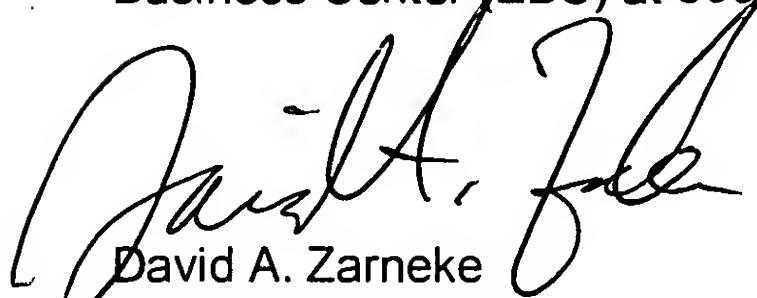
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Zarneke whose telephone number is (571)-272-1937. The examiner can normally be reached on M-F 7:30 AM-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Baumeister can be reached on (571)-272-1712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David A. Zarneke  
Primary Examiner  
February 28, 2005